

our snooze alarm chimes loudly as you drag yourself to your coffeepot. If this picture resembles how you begin your day, you may be one of 70 million people who suffer from America's new, silent epidemic: sleep deprivation.

According to a National Sleep Foundation poll, 65 percent reported not getting enough sleep, an increase of 33 percent from a survey done five years earlier.

No matter the person, chronic and acute sleep deprivation is cumulative and results in a sleep debt (the difference between the amount needed and the amount one slept). The average adult needs seven-and-a-half hours of sleep, while children need nine to 11. Some people may need only six hours, yet others require 10 hours of quality sleep.

If you daily sleep one hour less than needed, you accumulate an average 28 hours of sleep debt each month. Anyone who carries a sleep debt, whether two or 28 hours, doesn't perform at an optimal level. Sleep deprivation and debt have serious negative effects on

health, performance and safety.

Even when people aren't carrying a sleep debt, they are at risk of being affected by a drowsy person who is unable to operate equipment, drive a vehicle, or stand a watch in an alert state. Some studies cite sleepiness as contributing to the Chernobyl disaster, the Challenger explosion, and countless daily errors in judgment. If not caused by sleepiness, accidents certainly are aggravated by tired people who can't respond to impending events in a timely manner. At present, there is no way to replace or compensate for sleep debt; all you can do is to sleep more.

Soon after the loss of as little as two hours of sleep, your sleep debt begins to build up indefinitely. Excessive sleepiness may cause you to have an uncontrolled sleep episode, called a micro sleep, which can occur at any time without warning. For example, 40,000 injuries and 1,550 deaths occur annually because of drowsy drivers, according to the U.S. National Highway Traffic Safety Administration. A person with a substantial sleep debt may feel awake, alert and able to drive or per-

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form tasks, yet be at increased risk of accidents and injuries.

People in this state can have a profound effect on readiness in a variety of settings. They are at risk for elevated stress levels, impaired reaction times, poor attention span, and lowered productivity. The likelihood of accidents and injuries are increased because

How would you like to meet this guy on the road?



sleep deprivation affects most components of performance. In controlled lab studies, subjects had trouble remembering things, were uncoordinated, couldn't process information, and made poor decisions. Subjects also demonstrated poorer performance, despite increased effort, and many reported they didn't care about the quality of their work. It is essential that you understand the importance of healthy and adequate sleep to avoid negative outcomes.

Operational commitments create a unique obstacle for Sailors trying to balance sleep, work and family lives. Irregular shifts make it difficult for them to adhere to sleep patterns. Even with planned schedules and watch bills, Sailors must work at night when their biological clocks crave sleep and try to sleep when their bodies want to stay awake. Studies indicate that 10 to 20 percent of those who work night shifts report falling asleep on the job, and many more fall asleep while driving home.

An underway survey was done aboard a DDG in which subjects were asked to answer the question, "How many hours of sleep do you get on an average night?" The results showed

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that 46 percent got five or fewer hours, and 53 percent reported getting six to eight hours. Because the average person needs seven-and-a-half hours a night, the distribution of sleep debt in this crew was well over 70 percent.

To examine sleep patterns at a shore facility, the Epworth Sleepiness Scale was used to measure the prevalence of sleep debt. Twenty-two officers, civilians and enlisted people participated by assigning values to questions addressing their likelihood of falling asleep in various situations. The scores revealed that 32 percent of the staff showed mild to moderate sleepiness. Two staff members reported signs and symptoms consistent with a potential, undiagnosed sleep disorder, and one reported having had a drowsy-driving-related crash.

Symptoms associated with sleep deprivation include irritability, impatience, anxiety, and depression. Studies show causal associations between sleep deprivation and diabetes and obesity. Children often are misdiagnosed with attention-deficit disorder and attention-deficit-hyperactive disorder when, in reality, they are sleep deprived. Nothing can safeguard your health from the negative outcomes of sleep debt. The sleepy wear their debt on their sleeve as a symbol of dedication and endurance. Here are some things you can do to improve the quality of sleep:

- Avoid or consume less alcohol, caffeine and nicotine before bedtime. Also, drink fewer fluids, and avoid heavy meals before bedtime.
- Exercise regularly, preferably in the afternoon.
- Try a relaxing routine to unwind before bedtime.
- Establish a regular bedtime and wake time, and stick to them.
- Seek medical attention if you aren't sleeping well. You may have a treatable sleeping disorder.

Tips for Commanders

Department Heads

- Educate your shift workers about their need for sleep and the dangers of sleepiness and fatigue.
 - Install bright lights.
- Schedule sufficient breaks and time off, especially when people switch shifts. Avoid overtime.
- Allow short breaks for naps or exercise periods to improve alertness, judgment, safety, and productivity, especially during drills or long underway periods when people usually get less sleep.
- Ensure fatigued personnel don't operate equipment or perform procedures that place themselves or others at risk.
- Avoid short-duration rotations, such as "six on, six off" duty sections, because they prevent people from getting enough sleep.
- Encourage Sailors to drive safely when traveling to and from work. Everyone is at risk of drowsy-driving accidents. Promote carpools, taxis and public transportation.

For more information on sleep hygiene, sleep disorders, drowsy driving, and sleep research, visit the National Sleep Foundation homepage at www.sleepfoundation.org.

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